

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/634,678	LEE ET AL.	
	Examiner L. E. Crane	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amendments of 10/18 and 11/10/2004.
2.  The allowed claim(s) is/are 1,77 and 79-99.
3.  The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

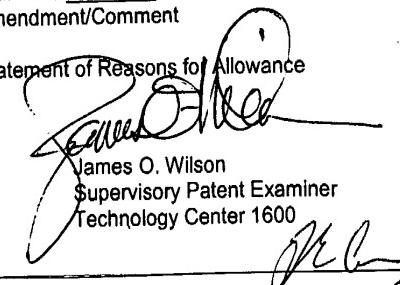
5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/18/2004
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 01042005.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

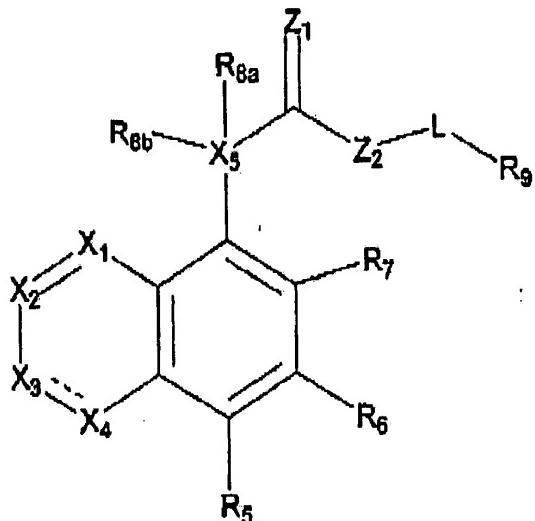


James O. Wilson  
Supervisory Patent Examiner  
Technology Center 1600

An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. §1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

Claim 1 was replaced with the following:

-- 1. A compound of formula (I)



(I),

of a pharmaceutically acceptable salt or prodrug thereof, wherein

--- is absent or is a single bond;

$X_1$  is  $CR_1$ ;

$X_2$  is selected from the group consisting of N and  $NR_2$ ;

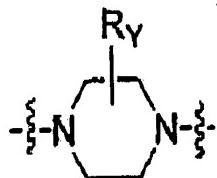
$X_3$  is selected from the group consisting of N and  $NR_3$ ;

$X_4$  is a bond;

$X_5$  is N;

$Z_1$  is O;

L is selected from the group consisting of alkenylene, alkylene,



alkynylene, cycloalkylene, , -(CH<sub>2</sub>)<sub>m</sub>O(CH<sub>2</sub>)<sub>n</sub>-, and N(R<sub>y</sub>), wherein the left end of -(CH<sub>2</sub>)<sub>m</sub>O(CH<sub>2</sub>)<sub>n</sub>- is attached to Z<sub>2</sub> and the right end is attached to R<sub>9</sub>;

m and n are each independently 1-6;

R<sub>y</sub> is selected from the group consisting of hydrogen and alkyl;

R<sub>1</sub>, R<sub>3</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are each independently selected from the

group consisting of hydrogen, alkenyl, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylcarbonyl, alkylcarbonylalkyl, alkylcarbonyloxy, carboxy, cyano, cyanoalkyl, cycloalkyl, cycloalkylalkyl, haloalkoxy, haloalkyl, haloalkylthio, halogen, hydroxy, hydroxyalkyl, -S(O)<sub>2</sub>OR<sub>A</sub>, -S(O)<sub>2</sub>RB, -NZ<sub>A</sub>Z<sub>B</sub>, (Z<sub>A</sub>Z<sub>B</sub>N)alkyl-, (Z<sub>A</sub>Z<sub>B</sub>N)carbonyl-, (Z<sub>A</sub>Z<sub>B</sub>N)carbonylalkyl-, and (Z<sub>A</sub>Z<sub>B</sub>N)sulfonyl-, wherein Z<sub>A</sub> and Z<sub>B</sub> are each independently selected from the group consisting of hydrogen, alkyl, alkylcarbonyl, formyl, aryl, and arylalkyl;

R<sub>2</sub> is independently selected from the group consisting of hydrogen, alkenyl, alkoxy, alkoxyalkoxy, alkoxyalkyl, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylcarbonyl, alkylcarbonylalkyl, alkylcarbonyloxy, carboxy, carboxyalkyl, cyano, cyanoalkyl, cycloalkyl, cycloalkylalkyl, haloalkoxy, haloalkyl, haloalkylthio, halogen, hydroxy, hydroxyalkyl, -NR<sub>A</sub>S(O)<sub>2</sub>RB, -S(O)<sub>2</sub>OR<sub>A</sub>, S(O)<sub>2</sub>RB, NZ<sub>A</sub>Z<sub>B</sub>, (Z<sub>A</sub>Z<sub>B</sub>N)alkyl, (Z<sub>A</sub>Z<sub>B</sub>N)carbonyl, (Z<sub>A</sub>Z<sub>B</sub>N)carbonylalkyl, and (Z<sub>A</sub>Z<sub>B</sub>N)sulfonyl;

R<sub>A</sub> is selected from the group consisting of hydrogen and alkyl;

R<sub>B</sub> is selected from the group consisting of alkyl, aryl, and arylalkyl;

R<sub>8a</sub> is selected from the group consisting of hydrogen and alkyl;

R<sub>8b</sub> is absent when X<sub>5</sub> is N; and

R<sub>9</sub> is selected from the group consisting of hydrogen, aryl, cycloalkyl, and heterocyclyl; with the proviso that variables X<sub>2</sub> and X<sub>3</sub> are not simultaneously NR<sub>2</sub> and NR<sub>3</sub>. --

In claim 77 following line 4, the term " X<sub>3</sub> is NR<sub>3</sub>; " was added as a new line.

In claim 92 at line 9, the term "heterocycle" (both occurrences) was replaced in both locations with the term -- heterocycl --.

In claim 94 at the end of the claim, the following term was added:  
-- , and a pharmaceutically acceptable carrier -- .

Authorization for this Examiner's Amendment was given in a telephone interview with **Ms. Gabryleda Ferrari-Deleo** on January 4, 2005.

Papers related to this application may be submitted to Group 1600 via facsimile transmission (FAX). The transmission of such papers must conform with the notice published in the Official Gazette (1096 OG 30, November 15, 1989). The telephone number to FAX (unofficially) directly to Examiner's computer is 571-273-0651. The telephone number for sending an Official FAX to the PTO is 703-872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner L. E. Crane whose telephone number is **571-272-0651**. The examiner can normally be reached between 9:30 AM and 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson, can be reached at **571-272-0661**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is **571-272-1600**.

All Post-Allowance Correspondence concerning this application must be mailed to:

BOX ISSUE FEE  
COMMISSIONER FOR PATENTS

Application/Control Number: 10/634,678  
Art Unit: 1623

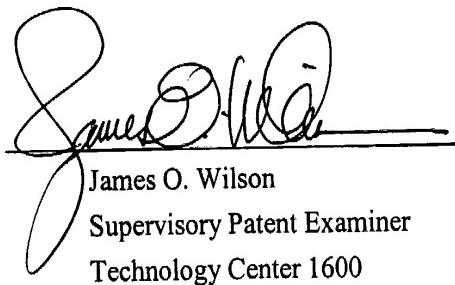
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OR you can FAX them to the Office of Patent Publications at 703-308-5083, in order to expedite the handling of such correspondence as amendments under 37 C.F.R. §1.312; Information Disclosure Statements (IDS's), and formal drawings. Sending Post-Allowance papers to Technology Center 1600 will only cause delays in matching papers with the case.

For information concerning status of correspondence sent after receipt of the Notice of Allowance, please contact the Correspondence Branch at 703-305-8027. The Notice of Allowance also has an insert containing contact information for other items, including Issue Fees, receipt of formal drawings, and the status of the application.

LECrane:lec  
01/04/2004



James O. Wilson  
Supervisory Patent Examiner  
Technology Center 1600